

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application. Please cancel claims 1 to 39 without prejudice or disclaimer. Please add new claims 40 to 87.

1-39. (Canceled).

Please add the following new claims:

--40. (New) A method of determining the amount or presence of antibodies to an immunogen in a blood sample comprising the steps of:

- (i) detecting the amount or presence of plasma antibodies or parts thereof and lymphocyte antibodies or parts thereof in said blood sample, wherein said plasma and lymphocyte antibodies are detected together or in separate assays; and
- (ii) determining the combined amount or presence of said plasma and lymphocyte antibodies or parts thereof, which determines the amount or presence of antibodies to said immunogen.

41. (New) The method of claim 40, further comprising disrupting the lymphocytes of said blood sample to release antibodies or parts thereof associated with said lymphocytes.

42. (New) The method of claim 40, further comprising the steps of:

- (i) isolating a plasma containing sample from said blood sample; and
- (ii) isolating a lymphocyte containing sample from said blood sample.

43. (New) The method of claim 41, further comprising the steps of:

- (i) isolating a plasma containing sample from said blood sample; and
- (ii) isolating a lymphocyte containing sample from said blood sample.

44. (New) The method of claim 40, wherein said blood sample is a whole blood sample, which is divided into two portions for the preparation of a lymphocyte containing

sample and a plasma containing sample.

45. (New) The method of claim 40, wherein a single whole blood aliquot is used to prepare a lymphocyte containing sample and a plasma containing sample.

46. (New) The method of claim 42 or 43, wherein said lymphocyte containing sample and/or said plasma containing sample is a purified preparation.

47. (New) The method of claim 43, wherein said plasma containing sample and/or said lymphocyte containing sample are recombined prior to disrupting the lymphocytes.

48. (New) The method of claim 43, wherein said plasma containing sample and/or said lymphocyte containing sample are recombined after disrupting the lymphocytes and prior to said detection step.

49. (New) The method of claim 47, wherein the ratio of said plasma containing sample and lymphocyte containing sample is from about 1:0.4 to about 1:4.

50. (New) The method of claim 49, wherein the ratio of said plasma containing sample and lymphocyte containing sample is 1:1.

51. (New) The method of claim 40, wherein said plasma and lymphocyte antibodies are detected in a single assay.

52. (New) The method of claim 40, wherein said plasma and lymphocyte antibodies are detected in separate assays.

53. (New) The method of claim 40, wherein said blood sample is a mammalian blood sample.

54. (New) The method of claim 53, wherein said blood sample is a human blood sample.
55. (New) The method of claim 40, wherein said blood sample is less than 1 ml.
56. (New) The method of claim 40, wherein red blood cells are removed from said blood sample.
57. (New) The method of claim 40, wherein non-B lymphocytes are removed from said blood sample.
58. (New) The method of claim 40, wherein said immunogen results from infection or vaccination.
59. (New) The method of claim 58, wherein said immunogen is a bacterial or viral antigen.
60. (New) The method of claim 59, wherein said antigen is selected from the group consisting of antigens from Herpes Simplex Virus, Cytomegalovirus, human immunodeficiency virus (HIV), a hepatitis virus, Epstein- Barr virus, Aphthovirus, Toxoplasma, tuberculosis, syphilis, and chlamydia.
61. (New) The method of claim 41, wherein the lymphocytes are disrupted by using chemical disruption buffers or physical disruption means.
62. (New) The method of claim 61, wherein the chemical disruption buffers contain detergent.
63. (New) The method of claim 40, wherein said antibodies or parts thereof are detected by contacting said antibodies or parts thereof with one or more antigens or

antibodies, which recognize said antibodies or parts thereof.

64. (New) The method of claim 63, wherein said antigens or antibodies, which recognize the antibodies or parts thereof to be detected, are carried on a solid phase.

65. (New) The method of claim 40, wherein the released antibodies are detected by means of a solid phase binding assay.

66. (New) The method of claim 64, wherein the solid phase of said solid phase binding assay carries one or more antigens recognized by the antibodies or parts thereof to be detected.

67. (New) The method of claim 64, wherein the solid phase of said solid phase binding assay carries one or more antibodies recognized by the antibodies or parts thereof to be detected.

68. (New) The method of claim 40, wherein the detection step is performed by immunoassay.

69. (New) The method of claim 68, wherein the immunoassay is Enzyme-Linked Immunosorbent Assay.

70. (New) The method of claim 67, wherein one or more antigens recognized by the antibodies to be detected are contacted with said solid phase and wherein said antibodies to be detected are immobilized on said solid phase.

71. (New) The method of claim 66 or 67, wherein one or more antibodies recognized by the antibodies to be detected are contacted with said solid phase and wherein said antibodies to be detected are immobilized on said solid phase.

72. (New) The method of claim 40, wherein said detection step takes place in

solution.

73. (New) The method of claim 40, wherein a soluble substrate is used for the detection step and yields a spectrophotometrically detectable signal.

74. (New) The method of claim 40, wherein a negative control is used.

75. (New) The method of claim 64, wherein multiple solid phases are employed, each bearing a different antigen or antibody, which recognizes a different antibody to be detected.

76. (New) The method of claim 41, wherein the blood sample is stored at a temperature of 4°C or less before the lymphocytes are disrupted.

77. (New) The method of claim 43, wherein the blood sample and/or the lymphocyte containing sample and/or the plasma containing sample are stored at a temperature of 4°C or less before the lymphocytes are disrupted.

78. (New) The method of claim 40, wherein the blood sample is whole blood frozen with from about 5 % to about 15 % DMSO before the lymphocytes are disrupted.

79. (New) The method of claim 40, wherein the lymphocytes in said sample are not incubated under conditions, which allow production and/or secretion of antibodies prior to said method.

80. (New) The method of claim 40, wherein multiple samples are tested simultaneously or sequentially.

81. (New) The method of claim 40 for use in identifying an animal infected by an immunogen.

82. (New) The method of claim 81, wherein said animal is a HIV infected patient.

83. (New) The method of claim 81 or 82, wherein the infection of said animal by said immunogen occurs less than 10 days before the blood sample is obtained from said animal.

84. (New) The method of claims 40, for use in high throughput screening.

85. (New) The method of claim 84, wherein said screening is of blood bank blood samples.

86. (New) The method of claim 40, for determining the suitability of a sample for inter-individual transplantation or transfusion.

87. (New) The method of claim 40 for diagnosing or monitoring infection of a human or non-human animal or a part of said animal by an immunogen, wherein the presence or extent of infection is determined by reference to appropriate control and/or reference samples.--